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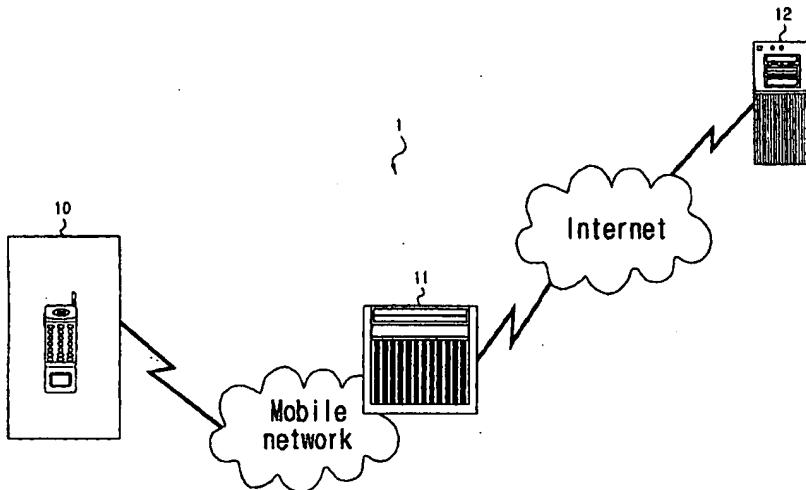
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: GAME-TYPE PRIZE DRAWING SYSTEM AND METHOD USING MOBILE INTERNET



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(57) Abstract: Disclosed is a game-type prize drawing system and method using Mobile-Internet having a portable terminal, a web server and a gateway. The system includes a prize drawing web server including an approval section for approving a prize application, a managing section to manage a prize drawing of each client and a game program operating section for operating a game program; a data base server composed of a client DB, a game program DB, a clients point DB and an affiliated companies point DB; and a script for reading out a data from the DBs of the DB server. According to the system and method, the use of the Mobile-Internet service by the members using the credit cards is expedited, and a great increase of the mobile communication terminal members is expected through the participation of the members using the credit cards in the prize drawing.

GAME-TYPE PRIZE DRAWING SYSTEM AND METHOD USING MOBILE INTERNET

BACKGROUND OF THE INVENTION

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Field of the Invention

The present invention relates generally to a game-type prize drawing system and method using a mobile Internet whereby a prize application is given to a client if client's credit card is used, the client can take part in a prize drawing game accordingly by 10 accessing a Internet homepage through a wireless terminal at any time and any place, and realize whether the client wins the prize on the spot.

Description of the Related Art

Generally, in order to secure more clients, headquarters of chain stores, selling agencies 15 having distributors, or department stores employ special events such as a prize drawing or thank-you presents. Especially, in case of the prize drawing, a relatively expensive present or prize money may be presented to a small number of members who are drawn.

Since the sale is increased only during the prize drawing event, its effect does not continue. Also, since a prize application is distributed to each client, high personal expenses 20 are needed, and the client must keep for a long time to the drawing result. Also, if the client does not know about his/her prize winning, or if the drawing ticket is disappeared, the prize-winning client is unable to carry off the prize. Accordingly, the primary object of the prize drawing event may attenuate.

Recently, The attempt to combine the mobile communication with the Internet has 25 been implemented by the mobile Internet. The mobile Internet is in contrast to a wire Internet wherein telephone lines or private lines are connected to computers, and provides an Internet service using wireless terminal or modem without communication line.

The mobile Internet is expected to provide diverse services with the operation of IMT-2000, and to be popularized with wireless terminal that require no special equipment 30 or appliances.

With the increase of the services related to the mobile Internet, cyber shopping mall or various kinds of advertising site using the mobile Internet is also increased.

Currently, the cyber shopping mall or advertising site utilizes the prize drawing system for awarding a specified prize or money to a client through the drawing. Specifically, if any client visits the cyber shopping mall or advertising site, and purchases commercial goods or clicks a view bar, the cyber shopping mall or advertising site draws the prize and 5 gives it to the client.

However, it has been currently required to implement the prize drawing system whereby the client can take part in the prize drawing at any time and any place using a wireless terminal in the mobile Internet environment in addition to the Internet.

10 SUMMARY OF THE INVENTION

Therefore, an object of the invention is to solve the problems involved in the related art, and to provide a game-type prize drawing system and method using a mobile Internet, whereby a prize application is given to a client through the mobile Internet 15 according to client's credit card transaction items, the client can take part in a prize drawing game accordingly by accessing a homepage of a credit card company through a wireless terminal at any time and any place, and realize whether the client wins the prize on the spot, thereby increasing the use of the credit card service and leading the activation of the credit card.

20 In order to achieve the above object, according to one aspect of the present invention, there is provided a prize drawing system using a mobile Internet comprising a wireless terminal having a WAP browser mounted thereon; a prize drawing web server for providing a service requested by the wireless terminal, including an approval section for approving a prize application with reference to transaction items of each client's credit card, 25 a management section for managing a prize drawing of each client by means of obtaining an approval information regarding the prize application of each client from the approval section, a game program driving section, controlled by the management section, for operating a game program; a DB server including a client DB for storing a list of clients having the prize application approved by the approval section, a game program DB for 30 storing several game programs, a client's point DB for storing points of each client, an affiliated company's point DB for storing points of each affiliated company; a script for reading data from the DBs of the DB server; and a gateway for making compatible

protocols of the wireless terminal and a prize drawing web server, wherein if the client accesses a homepage of a credit card company through the WAP browser and selects any one of a drawing-type prize game or an application obtaining match game, a corresponding game program is executed for a predetermined time by driving the DB server under the
5 control of the prize drawing web server.

According to another aspect of the present invention, there is provided a method of drawing a prize using a prize drawing system, comprising the steps of: laying a prize application point for a predetermined sum of money by periodically inquiring actual results of a client's credit card by an approval section; storing information of the client having a
10 prize application of predetermined point in a client DB; searching a homepage of a credit card company by accessing an Internet web site through a WAP browser of a wireless terminal; inputting a client's ID; displaying an image for selecting a game menu; determining whether a game selected by the client is a drawing-type prize game or an application obtaining match game; when the game is selected, playing the game for a
15 predetermined time; if the selected game is the drawing-type prize game, displaying a prize drawing result of the game after termination of the game; and if the selected game is the application obtaining match game, giving a prize application in proportion to winning score according to the result of the game after the termination of the game.

20 BRIEF DESCRIPTION OF THE DRAWINGS

The above object, and other features and advantages of the present invention will become more apparent after a reading of the following detailed description when taken in conjunction with the drawings, in which:

- 25 FIG. 1 is a view illustrating a general mobile communication WAP network;
FIG. 2 is a block diagram illustrating the construction of a game-type prize drawing system according to the present invention; and
FIG. 3a and FIG. 3b are flowchart illustrating a game-type prize drawing method according to the present invention.

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DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Hereinafter, the construction and effect of the present invention will be described with respect to a preferred embodiment illustrated in the annexed drawings.

As shown in FIG. 2, a prize drawing system using a mobile Internet according to the present invention includes a wireless terminal having a WAP browser mounted thereon; 5 a prize drawing web server 23 for providing a service requested by the wireless terminal, a DB server 32, a script 27 for reading data from the DBs of the DB server; and a gateway for making compatible protocols of the wireless terminal and a prize drawing web server.

The prize drawing web server 23 including an approval section 24 for approving a prize application with reference to transaction items of each client's credit card, a 10 management section 25 for managing a prize drawing of each client by means of obtaining an approval information regarding the prize application of each client from the approval section 24, a game program driving section 26, controlled by the management section 25, for operating a game program;

The DB server 32 including a client DB 28 for storing a list of clients having the 15 prize application approved by the approval section 24, a game program DB 29 for storing several game programs, a client's point DB 30 for storing points of each client, an affiliated company's point DB 31 for storing points of each affiliated company;

Also, the prize drawing system may further includes a security system 22 which is a firewall for preventing the information saved in the prize drawing web sever 23 from 20 leaking without permission.

FIG. 3a and FIG. 3b are flowchart illustrating a game-type prize drawing method according to the present invention.

Specifically, a method of drawing a prize according to the present invention includes the steps of laying a prize application point for a predetermined sum of money by 25 periodically inquiring actual results of a client's credit card by an approval section (step S200), storing information of the client having a prize application of predetermined point in a client DB (step S201), searching a homepage of a credit card company by accessing an Internet web site through a WAP browser of a wireless terminal (step S202 and step S203), inputting a client's ID (step S204), displaying an image for selecting a game menu (step 30 S205), determining whether a game selected by the client is a drawing-type prize game or an application obtaining match game (step S206 and step S207), when the game is selected, playing the game for a predetermined time (step S208 and step S209), if the selected game

is the drawing-type prize game, displaying a prize drawing result of the game after termination of the game (step S210 and step S212), and if the selected game is the application obtaining match game, giving a prize application in proportion to winning score according to the result of the game after the termination of the game (step S212 and step 5 S213).

The operation of the present invention as constructed above will now be explained in detail.

In order to implement the present invention, a mobile communication wireless application protocol (WAP) network 1 as shown in FIG. 1 is required. The mobile 10 communication WAP network 1 includes a client 10, gateway 11, and Internet web server 12.

This mobile communication WAP network 1 enables the direct use of the Internet service through a digital cellular phone such as a PCS and a wireless terminal, and the contents and application techniques developed for the WAP network can also be used for 15 other kinds of mobile communication network's techniques and equipment.

Typically, in the mobile communication WAP network 1, a WAP gateway 11 called a WAP proxy is provided between the wireless terminal 10 having a WAP browser mounted thereon and the Internet web server 12. The main function of the WAP gateway 11 is compatible with the WAP protocol and Internet TCP/IP protocol.

20 Specifically, all the Internet service requests of the wireless terminal 10 pass through the WAP gateway 11, and the WAP gateway 11 converts the WAP protocol into an HTTP protocol matching the Internet environment, and transmits the requested service to the corresponding Internet web server 12 through the wire Internet network.

Thereafter, the WAP gateway 11 receives a response from the Internet web server 25 12, and transmits the contents of the response according to the WAP protocol to the wireless terminal 10 first requested the service to complete the process.

The greatest advantage of the mobile communication WAP network 1 is that it can optimize the mobile communication network environment while it accommodates the existing Internet environment as it is.

30 An embodiment of the present invention incorporated in the mobile

communication WAP network as described above will be explained with reference to FIG. 2, FIG. 3a and FIG. 3b.

First, if the client uses his/her credit card in an affiliated shop or bank (lump sum payment, allotment, cash service, etc.), the information related to transaction items of the 5 client is transferred to the prize drawing server 23 of the credit card company from the affiliated shop or bank. The approval section 24 of the prize drawing server 23 accumulates points for a predetermined amount of money at every time of using the credit card, and gives a prize application to the client.

For example, one point is accumulated for offering of KRW 10,000, and one prize 10 application for a point is given.

And the approval section 24 check with the client's point score whether the client has a prize application. If it is checked that the client has a prize application, the approval section 24 stores a prize application in the client DB 28 through the script 27.

Also, the prize application can be given according to a mileage point ratio, if the 15 mileage point is over a predetermined score according to the actual result of the credit card at the approval step performed by the approval section 24.

As described above, the client DB 28 stores the information about a prize applications and the client accesses the Internet web site by selecting an "Internet access" menu through the wireless terminal 20 having the WAP browser mounted thereon.

20 If the client inputs his/her ID by accessing a homepage of a credit card company when the Internet web site is accessed, diverse game menu images are displayed on a screen of the wireless terminal.

Since the prize drawing site is operated separately from the credit card company, any person, who is not the member of the corresponding credit card company, can enjoy the 25 prize drawing if he/she separately registers as a member of the prize drawing site.

Undoubtedly the homepage of the corresponding credit card site and the homepage of the prize drawing site are linked together, and can be mutually accessed by the log-on operation.

Now, the process of obtaining the prize application and drawing the prize by

accessing the prize drawing site through the user's wireless terminal will be explained.

If the user inputs his/her client ID through the wireless terminal, a specified signal is inputted to the WAP gateway 21 through the mobile communication network, and thus the WAP gateway 21 converts the WAP protocol into the HTTP protocol matching the
5 Internet environment, and transmits the requested service to the web server 22 through the wire Internet network.

The prize drawing web server 23 that received the request for the client ID confirmation inquires the client ID through the client DB 28, and then sends an approval message to the WAP gateway 21 if the corresponding client ID is confirmed. The WAP
10 gateway 21 sends again the approval message to the wireless terminal 20 by the WAP protocol to finally display the message through the terminal screen.

If the client ID approval process is completed and the user enters into the homepage of the prize drawing site, the user may straight play the prize drawing game with the prize applications accumulated up to the present, or play the application obtaining
15 match game if the prize applications are insufficient.

Also, if the client clicks a specified advertisement, the user can obtain the prize application of a predetermined point.

The application obtaining match game may be classified into a unidirectional match game for one client such as a slot machine, bingo game, etc., a bi-directional match
20 game for two client's match, and a lottery game.

The bi-directional match game transfers any point of a loser to a winner in proportion to a win score, which is determined through the match game, and includes Tetris and Starcraft games.

For instance, if the client selects any one of the application match game such as the
25 slot machine, bingo game, lottery game, etc., with reference to the game menu displayed on the terminal screen, the management section 25 receives the selection signal and drives the game program driving section 26. Then the game program driving section 26 reads out the corresponding game program from the game program DB 29 through the script 27 to play the game.

30 If the prize applications of the predetermined points are obtained through the

application obtaining game, the client can play the prize drawing game again by pressing the prize drawing icon.

For example, in the prize drawing, if all the 7 figures that the client selected coincide with those of the lucky number, the client wins the first prize, while the client wins 5 the second to seventh prizes according to the number of figures that coincide with those of the lucky number. An e-coin that is a kind of credit card electronic money is allocated to the client according to the winning grade of the prize.

At this time, the allocated e-coin can be converted into a prize application later, or deposited in the client's account if the accumulated points exceed 1000.

10 Since all the prize drawing games are probability games, the management section 25 confirms whether the client is drawn, and displays the result of prize drawing such as "0000 client, congratulations on your prize winning" on the terminal screen.

If the client selects the bidirectional match game for two clients, the management section 25 receives the selection signal, and drives the game program driving section 26. 15 Then the game program driving section 26 reads out the corresponding game program from the game program DB 29 through the script 27.

The readout game program is sent to the web site of the prize drawing web server 23, and then to the WAP gateway 21 through the Internet. At this time, the HTTP protocol is converted into the WAP protocol, and then finally received to the client's wireless 20 terminal 20 through the mobile communication network, so that the client can play the game on the screen of the wireless terminal.

For example, if client A obtains 50 scores and client B obtains 100 scores through the Tetris game selected from the application obtaining match game, the management section 25 checks and compares the scores of the players to determine a winner. Then, the 25 management section 25 transfers the application points of the client A, who is the loser, to the client B, who is the winner.

Also, in case that 10 winning score correspond to one application point, if the winning score of the client B are 50, the client B may obtain 5 application points from the client A.

30 At this time, the management section 25 transfers and stores a 5 application points

from the client A in the client DB 30.

Also, if the client is drawn to a certain grade prize through the prize drawing game, the client receives a corresponding e-coin, which may be sent to the client as a non-bankbook deposit. And, the client can purchase goods corresponding to the e-coin in an affiliated shopping mall linked to the homepage of the credit card company. The latter is the case that the e-coin is used as the electronic money.

Also, if any e-coin, which is not drawn, exists after the prize drawing, the drawing-type prize game may be replayed for a predetermined time to give the winning chance to the clients having the prize applications.

Meanwhile, an affiliated company member can visit to the homepage of the credit card company. At this time, the affiliated company member obtains the prize application according to the association condition, and takes part in the drawing-type prize game or in the application obtaining match game as described above.

Also, the prize applications can be given to the owners of the affiliated shops in order to lead them to visit to the homepage of the credit card company.

Meanwhile, the prize drawing system according to the present invention can prevent the client's information from leaking by hackers by constructing the security system 22 that is a firewall for preventing the client's information in the prize drawing web server 23 and DB server 32 from leaking without permission.

With the present invention as described above, the client can access the Internet through a wireless terminal, and then access a homepage of a desired credit card company at any time and any place to play a prize drawing game with accumulated prize applications or to play a prize application obtaining match game if the prize application points are insufficient for the prize drawing game. At this time, the result of the prize drawing is displayed on the spot, and an e-coin is allocated to the client if the client wins the game. According to the present invention, the prize application is given to the clients of the credit card companies or the prize drawing sites through the mobile Internet, and whether the client wins the prize is informed on the spot, so that the use of the mobile Internet and wireless terminal is increased with the leading of the activation of the credit card.

That is, the client's participation in diverse drawing-type games provided from the

credit card companies through the mobile communication network and Internet is increased, and thus the image of the company is heightened as a mobile Internet service company to keep pace with the operation of the IMT-2000 system.

While this invention has been described in connection with what is presently 5 considered to be the most practical and preferred embodiment, it is to be understood that other modifications, additions, and substitutions thereof may be made without departing from the scope of the invention. Thus, the invention should not be limited to the disclosed embodiment, but should be defined by the scope of the appended claims and their equivalents.

10

WHAT IS CLAIMED IS:

1. A prize drawing system using a mobile Internet comprising:
 - a wireless terminal having a WAP browser mounted thereon;
 - 5 a prize drawing web server for providing a service requested by the wireless terminal, including an approval section for approving a prize application with reference to transaction items of each client's credit card, a management section for managing a prize drawing of each client by means of obtaining an approval information regarding the prize application of each client from the approval section, a game program driving section, 10 controlled by the management section, for operating a game program;
 - a DB server including a client DB for storing a list of clients having the prize application approved by the approval section, a game program DB for storing several game programs, a client's point DB for storing points of each client, an affiliated company's point DB for storing points of each affiliated company;
 - 15 a script for reading data from the DBs of the DB server; and
 - a gateway for making compatible protocols of the wireless terminal and a prize drawing web server,
- wherein if the client accesses a homepage of a credit card company through the WAP browser and selects any one of a drawing-type prize game or an application obtaining 20 match game, a corresponding game program is executed for a predetermined time by driving the DB server under the control of the prize drawing web server.

2. A method of drawing a prize using a prize drawing system, comprising the steps 25 of:
 - laying a prize application point for a predetermined sum of money by periodically inquiring actual results of a client's credit card by an approval section;
 - storing information of the client having a prize application of predetermined point in a client DB;
 - 30 searching a homepage of a credit card company by accessing an Internet web site through a WAP browser of a wireless terminal;
 - inputting a client's ID;

- displaying an image for selecting a game menu;
- determining whether a game selected by the client is a drawing-type prize game or an application obtaining match game;
- when the game is selected, playing the game for a predetermined time;
- 5 if the selected game is the drawing-type prize game, displaying a prize drawing result of the game after termination of the game; and
- if the selected game is the application obtaining match game, giving a prize application in proportion to winning score according to the result of the game after the termination of the game.
- 10
3. The method as claimed in claim 2, wherein the prize drawing is of a lottery type wherein the client wins a prize if a predetermined number of figures coincide with that of a prize winning number, and a prize money that corresponds to a prize grade is converted into a corresponding application or e-coin that the client can receive as a non-bankbook deposit.
- 15
4. The method as claimed in claim 2, wherein if any prize, which is not drawn, exists, the drawing-type prize game is replayed.
5. The method as claimed in claim 2, wherein at laying a prize application point, if
- 20 prize application point according to the use of the credit card is above predetermined point, the prize application is given according to a point rate.
6. The method as claimed in claim 2, further comprising the steps of obtaining the
- 25 prize application according to an association condition, and participating in the drawing-type prize game or the application obtaining match game even when an associated company client visits the homepage of the credit card company.

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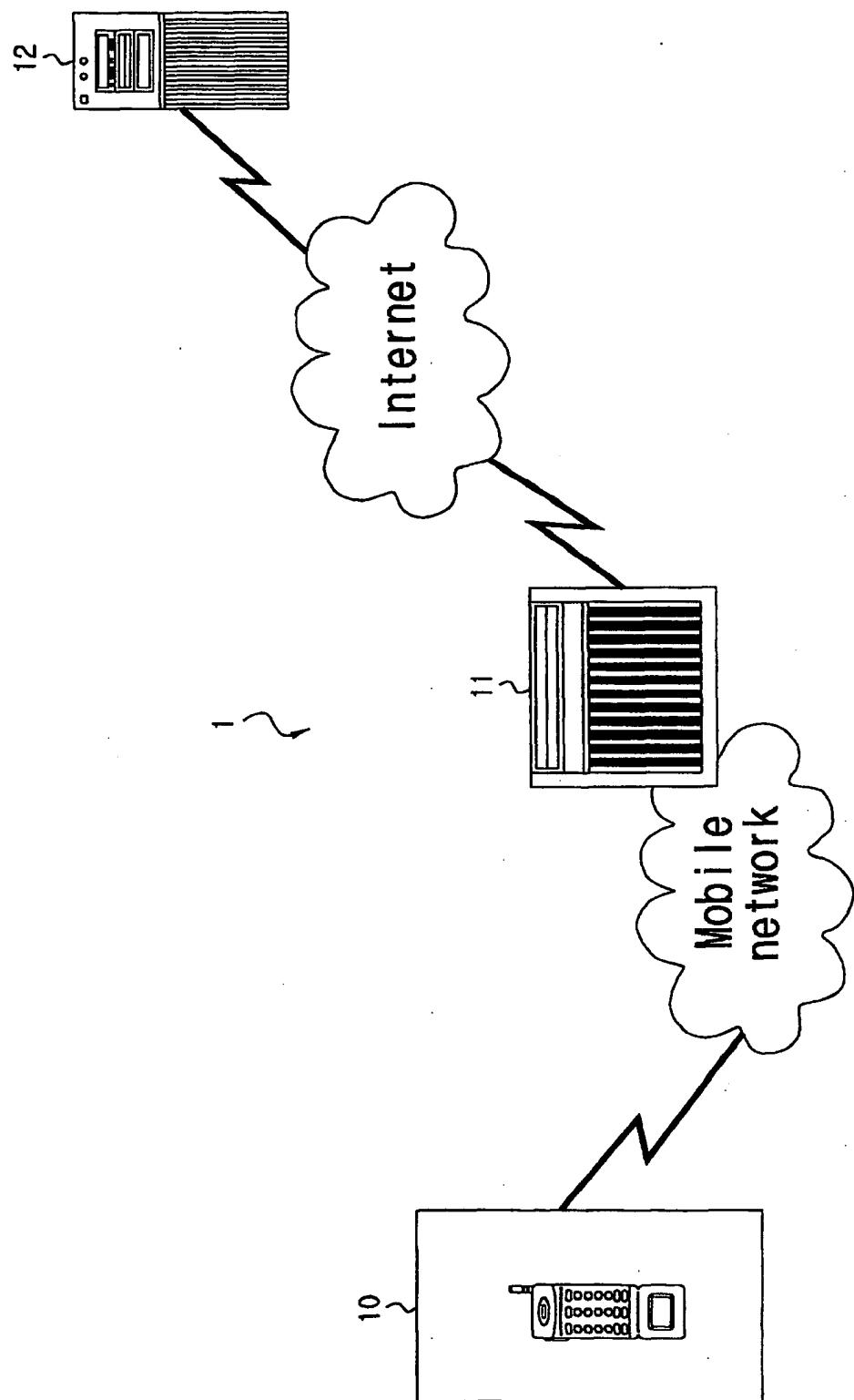


FIG. 1

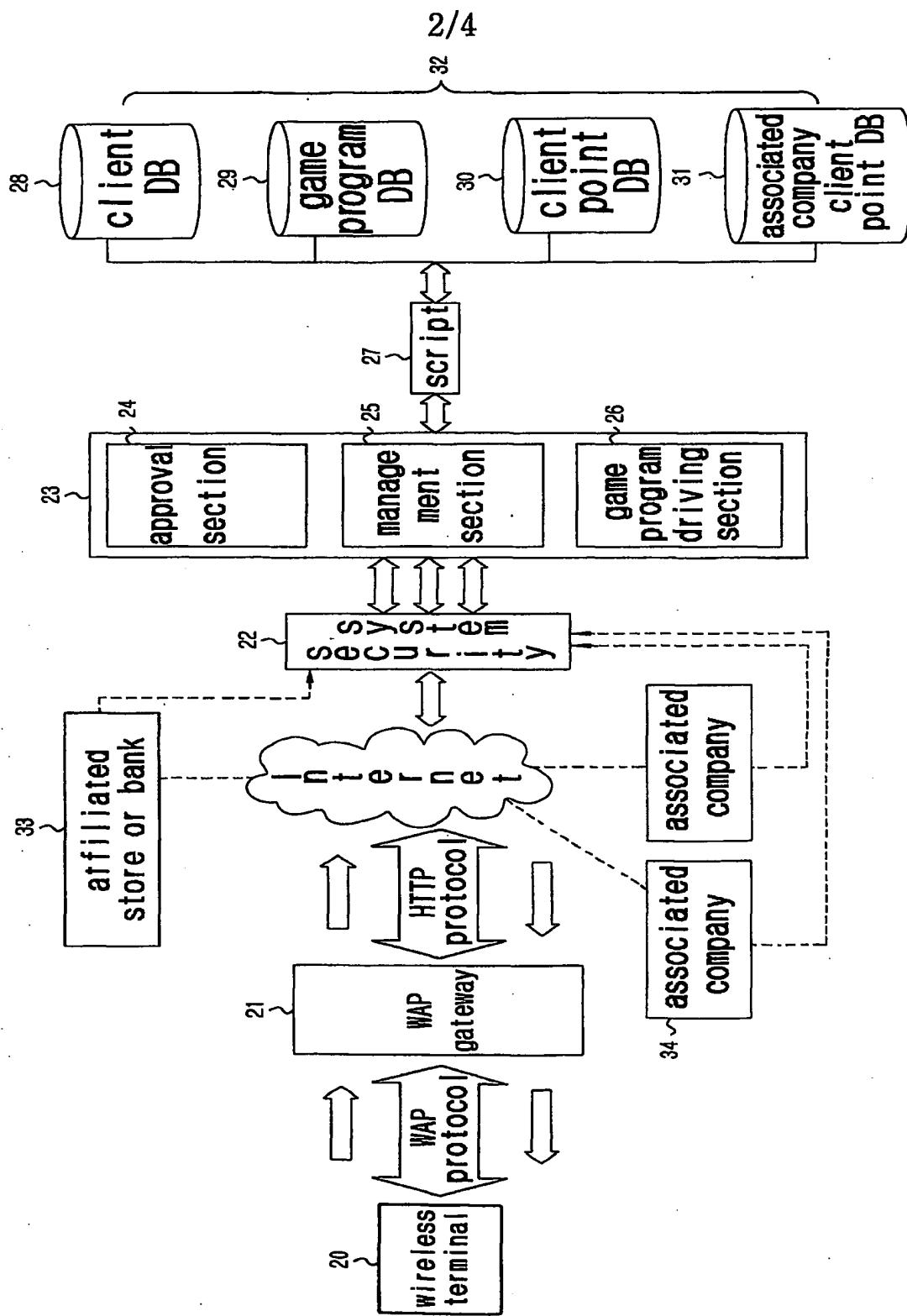


FIG. 2

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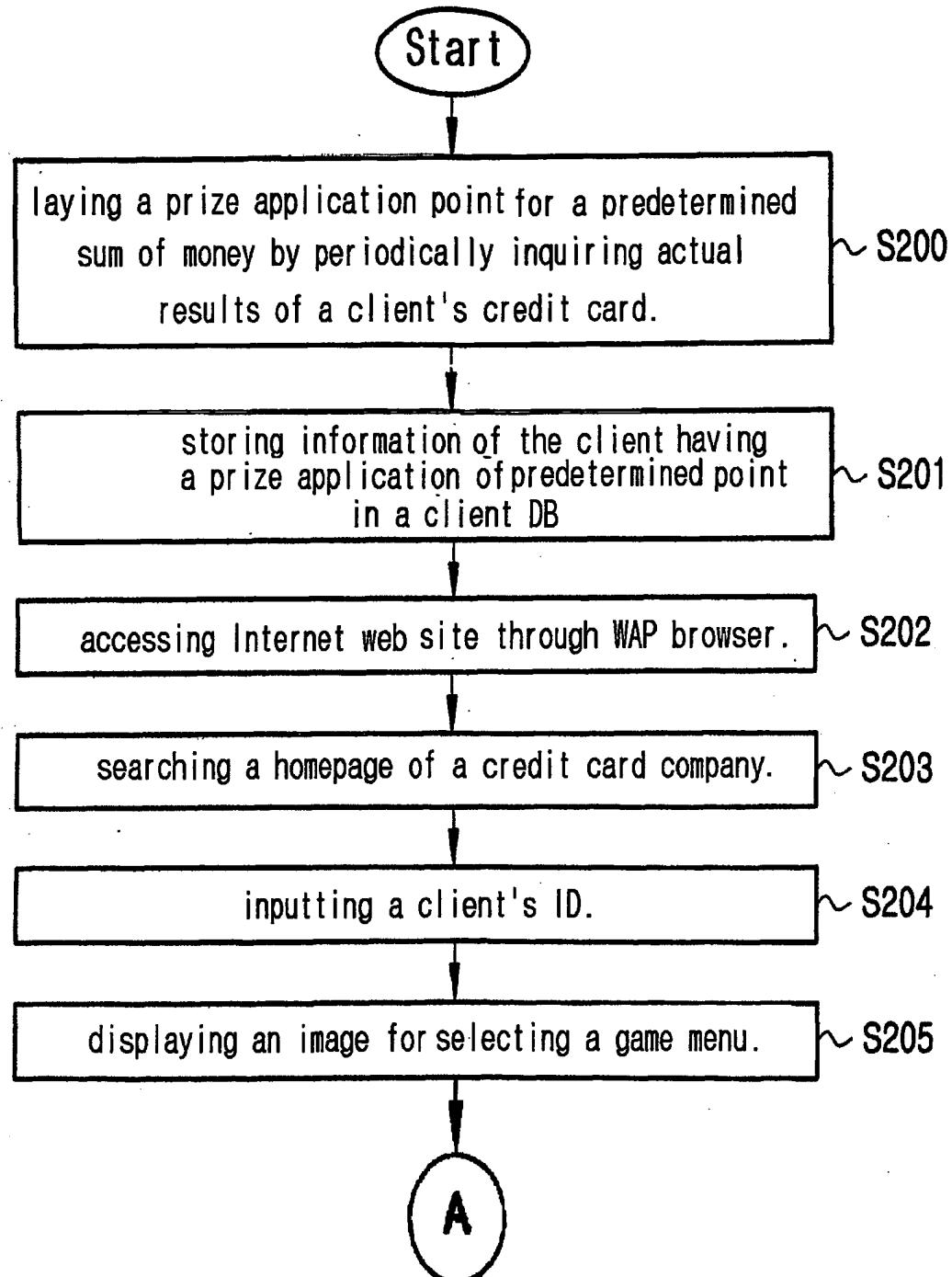


FIG. 3a

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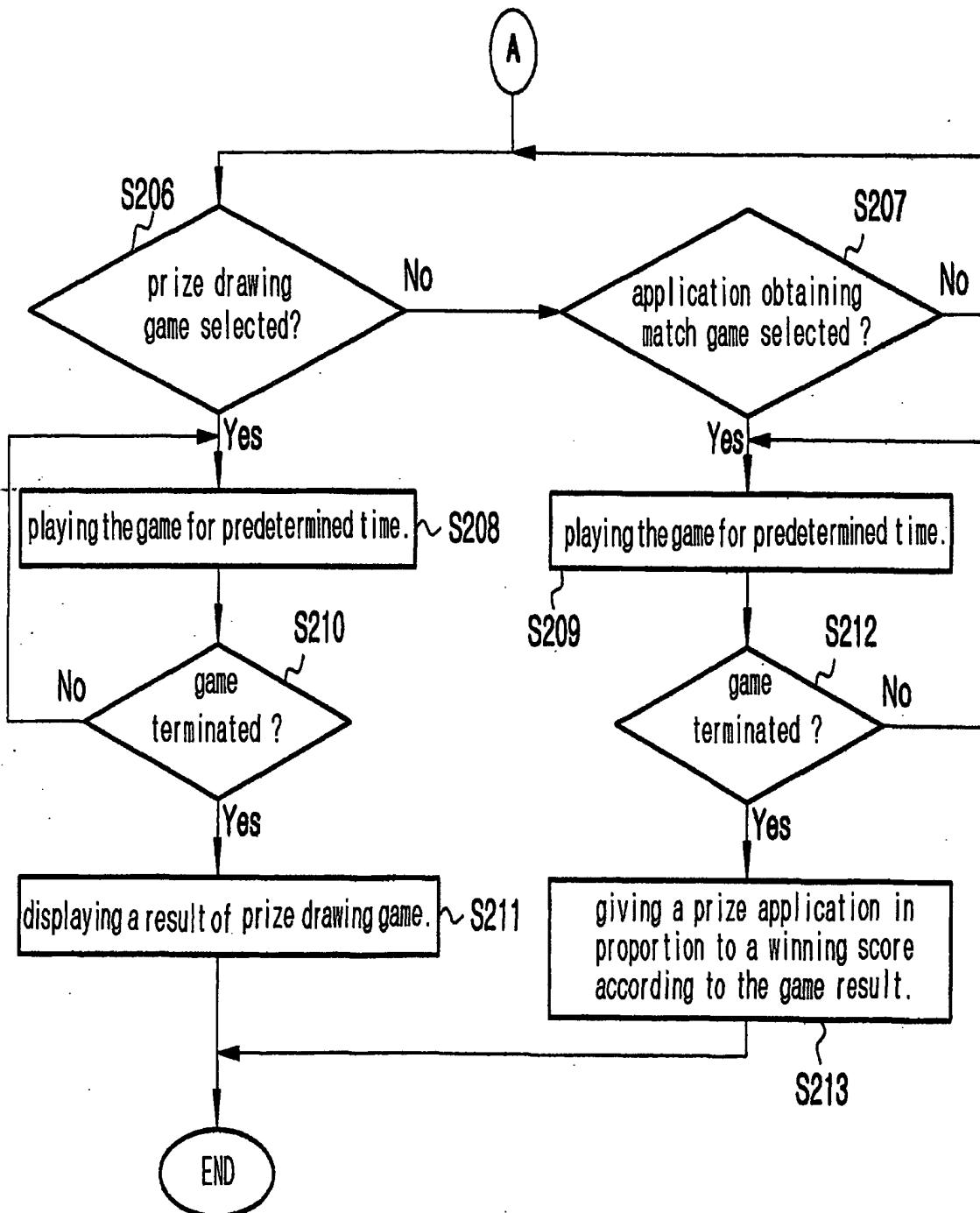


FIG. 3b

INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR01/00630

A. CLASSIFICATION OF SUBJECT MATTER**IPC7 G06F 17/60,**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

G06F 17/60, A63F 9/22 : IPC7

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
KR, JP : IPC as aboveElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)
NEW PATENT&UTILITY SEARCH SYSTEM**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,117,013 A (PETER EIBA) 12 SEPTEMBER 2000, see abstract, Claims.	1-2
Y	US 5,954,582 A (ROBERT W. ZACH) 21 SEPTEMBER 1999, see abstract, Claims NO. 1-2, 9,20	1-2, 4
A	US 5,916,024 A (HENRY VON KOHORN) 29 JUNE 1999, see abstract, whole document.	1-6
A	US 6,117,011 A (DENIS ERNESTOVICH LVOV) 12 SEPTEMBER 2000, see abstract	1

 Further documents are listed in the continuation of Box C. See patent family annex.

"A"	Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E"	earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"O"	document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 15 JANUARY 2002 (15.01.2002)	Date of mailing of the international search report 16 JANUARY 2002 (16.01.2002)
Name and mailing address of the ISA/KR Korean Intellectual Property Office Government Complex-Daejeon, Dunsan-dong, Seo-gu, Daejeon Metropolitan City 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer BAE, Soon Goo Telephone No. 82-42-481-5742



INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/KR01/00630

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5954582	21.09.99	WO 99/30787	24.06.99
US 6117013	12.09.00	WO 96/23289	01.08.96